

Counting the Summits

By Stephen Smith

*"I live not in myself, but I become
Portion of that around me: and to me
High mountains are a feeling, but the hum
Of human cities torture." - Lord Byron*

Meeting for Breakfast

If Lord Byron was suggesting an escape from city life, Waterton-Glacier International Peace Park provides 267 reasons to do so. A few years ago, I began a listing of all the summits in the Park that I could find on topographical maps. My hope was to motivate me as I select the next summit to attempt. In sharing this list with friends in our climbing circle, it was apparent there was high interest in such a listing, as long as it proved comprehensive and accurate.

The Approach

As I contemplated article possibilities for the Journal this year, it seemed appropriate to share this information with our membership. For help with the published version, I enlisted Bill Blunk, Sally Cameron-Russell, Gordon Edwards, Jane Edwards, Bill Hedglin, Larry Hiller, Ken McDermott, Larry Sandefur, Ralph Thornton, Jim Till, and Denis Twohig to serve on an ad-hoc "summit committee" with the purpose of reviewing the listing and commenting on any errors/omissions/additions. It quickly became clear from the committee our need to clarify the criteria used in determining the designation of a summit. After all, there are hundreds of unnamed summits in the Park that could be listed by elevation only, but should they all be included in a summit listing?

The consensus from the committee was to include all summits:

- (a) that lie within the Park boundary or those unique summits bisected by the Park boundary; and are
- (b) identified by name on the latest official topographical maps, including quadrangles; or
- (c) identified in current and past editions of Dr. Edwards' A Climbers Guide to Glacier National Park; or
- (d) in articles written for the Journal of the Glacier Mountaineering Society Going-to-the-Sun, dating back to the original publication in January, 1980. (I owe Denis and Shirley Twohig many thanks for making available all of the past editions for research.)

Criteria (a) and (b) comprise the official summits in boldface type on the list, that is summits whose names one can find on official topographical maps. Allowing criteria (c) and (d) makes room for the wild, unnamed summits such as Peak 8,888 well-described by Bill Hedglin in the 1999 GMS Journal.

In addition to the committee's input and criteria, I used several resources in finalizing the summit listing. There is a new 1:100,000 topographical map available for Glacier National Park - the new 1998 map replaces the 1968 map, but available quadrangles are not completely updated yet, with many still dated 1968. The latest available quadrangles were used for this listing. The new maps include such name changes as "Squaw Mountain" to "Dancing Lady" and the "Lewis Range" to "Lewis and Clark Range." Another useful resource was Delorme's 3-D Topoquads CD-ROM series of Montana that made searching for the remote unnamed peaks faster.

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The Scree Field

My idealistic hopes of this process being cut-and-dried soon faded. Even with the criteria decided, there were countless issues with which to be dealt. Example: has anyone heard of Adair Ridge?? Initially, I was going to exclude all named ridges except Porcupine Ridge (which at 9,128' is an obvious summit), but most of the committee felt this truncation was too arbitrary - that all ridges must be considered for consistency. In the end, it seemed including all ridges was the most objective method in determining the list, as opposed to randomly deleting summits below certain elevations. Another issue was triangulation stations such as Parke, Medicine, etc. The committee felt that these points were named for surveying purposes only and as such should not be included unless fitting the above criteria of (c) and (d): the only stations making the list are Medicine and Cracker Peaks.

The elevations of several summits had to be approximated because the exact elevations are not found on any maps. Both GMS President Ralph Thornton and Ken McDermott indicated the best method to approximate elevations is to find the highest contour, then add half of the contour interval for the particular map. This is the method used in the list for summits with elevations marked "approx."

To increase accuracy in the summit count, care was taken to ensure the summits listed are unique, that is, not listed twice by different names. An example: the high point of Camas Ridge is Rogers Peak; since Rogers Peak is the more typical mountaineering destination, Camas Ridge is not listed by itself but rather in a footnote. Another example is Citadel Peaks: The Climber's Guide describes Citadel Spire, which happens to be the high point of Citadel Peaks also. As a result, the list shows Citadel Peaks with the elevation of Citadel Spire.

The Final Push

The greatest challenge I encountered was that the topographical data for Waterton is lacking in accuracy and consistency. To assess the summits in Waterton, I cross-referenced the official 1:50,000 maps from the Canada Centre for Mapping (which were missing numerous elevations), National Geographic's "Trails Illustrated" version, the website peakfinder.com (an information resource devoted to the Canadian Rockies), several different official small-scale maps issued by Parks Canada, and research by GMS member Ken McDermott of Alberta. A great example of the inconsistencies I found was that among three maps were three different elevations of Mount Blakiston, the highest summit in Waterton.

Another complication is that modern-day Canadian summit elevations are based on the metric system, then converted as required to English units, with different maps having different English elevations but often the same metric elevations. The metric unit of measurement is inherently inaccurate when used in summit elevations: since decimal points are not used, a 2,281-meter summit can be anywhere from 7,482 feet to 7,485 feet. The method I used to combat this wide tolerance was to multiply metric elevations by the conversion factor of 3.280839895, then round up to the nearest foot if the resulting fraction was greater than or equal to 0.5 feet. This convention is typically accepted in the math and science fields but in everyday usage is often shortened to just a couple of significant figures - explaining why there may be some discrepancies between the elevations listed here and the English conversions listed on certain maps. While you are reading this thinking, "Who cares?" remember that 10,004' Mt. Merritt misses being a 9,000-footer by only five feet!

Back at the Parking Lot

I appreciate the help of the committee members who contributed input on what turned out to be an exhaustive process. As more unnamed summits are climbed and described in written form, this list will grow longer. Perhaps in a few years, the list may re-surface with revisions if there are enough additions and interest from within the organization. For now, I hope the list motivates you, as it does me, when you are choosing which summit to tackle next!